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CP372

Assignment 2 - Documentation

Datagram Format

Sender Datagrams consist of the following byte arrays, concatenated together. The fileBuffer section holds the packet’s data read from the file, and the seqNum section is just a single byte counting upward (or in the case of Stop & Wait, alternates between 0 and 1). seqNum signifies EOT when -1 in Stop & Wait, and -2 in Go-Back-N. Receiver “ack” Datagrams send back a value of 1 in Stop & Wait, and the last received seqNum in Go-Back-N.

*Sender:* (seqNum = Byte[1]) + (fileBuffer = Byte[124])

*Receiver:* ack = Byte[1]

Stop and Wait Timing

Small file size (1kb):

|  |  |  |
| --- | --- | --- |
| **Reliability number** | **Time (0.5 second timeout)** | **Time (1.5 second timeout)** |
| 0 | 5ms | 5ms |
| 10 | 5ms | 5ms |
| 100 | 5ms | 5ms |

Observation: File size is too small for reliability to effect transmission time.

Large file size (1.1mb):

|  |  |  |
| --- | --- | --- |
| **Reliability number** | **Time (0.5 second timeout)** | **Time (1.5 second timeout)** |
| 0 | 2593ms | 2688ms |
| 10 | 549994ms | 1606087ms |
| 100 | 61292ms | 153275ms |